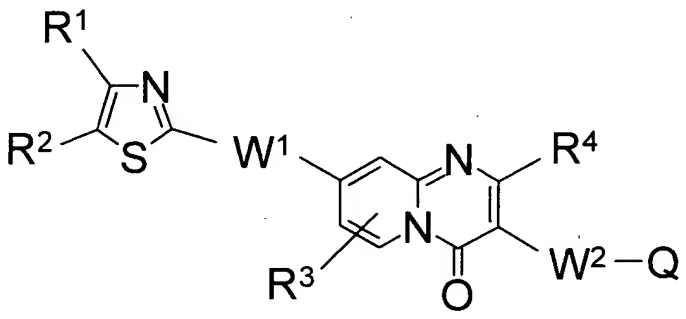
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Previously Presented): A compound represented by the following formula (I) or a physiologically acceptable salt thereof, or a hydrate thereof:



(I)

wherein, R^1 and R^2 each independently represent hydrogen atom, a halogen atom, hydroxyl group, a group of $OZ_{1\text{-}6}$ (the group of $OZ_{1\text{-}6}$ represents an alkyl group having 1-6 carbon atoms or a fluoroalkyl group having 1-6 carbon atoms, which bonds via the oxygen atom), a group of $S(O)_nZ_{1\text{-}4}$ ($Z_{1\text{-}4}$ represents an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms or an alkylene group derived therefrom), a group of $N(R^{12})(R^{13})$ (R^{12} and R^{13} each independently represent hydrogen atom, an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon

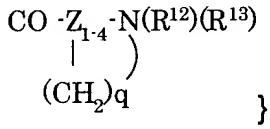
atoms), a group of Z_{1-8} which may be substituted (Z_{1-8} represents an alkyl group having 1-8 carbon atoms or a fluoroalkyl group having 1-8 carbon atoms), a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group, or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$);

W^1 represents a group selected from the group consisting of -CH=CH-, $-N(R^{12})CO-$, $-CON(R^{12})-$, $-CH_2O-$ and $-CH_2CH_2-$ (each of the aforementioned groups binds to the thiazole ring at the left end);

R^3 represents hydrogen atom, a halogen atom, hydroxyl group or an amino group;

R^4 represents a group selected from the group consisting of hydrogen atom, a group of $-OZ_{0-4}R^5$ (Z_{0-4} represents an alkylene group having 1-4 carbon atoms, a fluorine-substituted alkylene group having 1-4 carbon atoms or a single bond, and R^5 represents a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$), a group of $-S(O)_nZ_{0-4}R^5$, a group of $-N(R^6)(R^7)$ {R^6 and R^7 each

independently represent hydrogen atom or Z_{1-4}, or they may bind to each other to form a saturated or unsaturated 5- to 7-membered ring (the ring may contain one or two hetero atoms as ring constituting atoms), and R^6 and R^7 may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of $OCON(R^{12})(R^{13})$, a group of $CON(R^{12})(R^{13})$, a group of $N(R^{12})CON(R^{12})(R^{13})$, a group of Z_{1-4}, a group of OZ_{1-4}, a group $S(O)_nZ_{1-4}$, group of CH_2OH, a group of $(CH_2)_mN(R^{12})(R^{13})$, carboxyl group, cyano group, a group of $CO\text{-}Z_{1-4}(R^{10})\text{-}N(R^{12})(R^{13})$ (R^{10} is a substituent corresponding to a side chain on an amino acid carbon or a group of $-Z_{1-4}-R^{11}$ (R^{11} represents a substituent which forms a quaternary salt) and a group of



}, a 5- or 6-membered aryl group which may be substituted and a 5- or 6-membered unsaturated heterocyclic group which may be substituted;

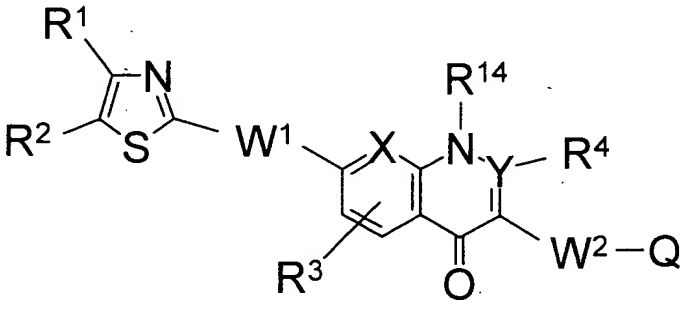
W^2 represents a single bond or $-C(R^8)=C(R^9)-$ (R^8 and R^9 each independently represent hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, cyano group, carboxyl group, hydroxymethyl group, cyanomethyl group, vinyl group or a group of $N(R^{12})(R^{13})$), Q represents an acidic group, and W^2 and Q may bind together to form vinylidenethiazolidinedione in *E*- or *Z*-configuration or an equivalent heterocyclic ring; m and n each independently represent an integer of 0 to 2, and q represents an integer of 0 to 3.

Claim 2 (Previously Presented): A medicament composition for eliminating resistance of a microorganism with acquired drug resistance, which comprises a compound represented by formula (I) according to claim 1 or a physiologically acceptable salt thereof as an active ingredient.

Claim 3 (Previously Presented): A medicament composition for enhancing effect of an antimicrobial agent, which comprises a compound represented by formula (I) according to claim 1 or a physiologically acceptable salt thereof as an active ingredient.

Claim 4 (Currently Amended): A pharmaceutical composition for ~~therapeutic~~ treatment of infection ~~by microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ which comprises a compound represented by formula (I) according to claim 1 or a physiologically acceptable salt thereof together with an antimicrobial agent.

Claim 5 (Previously Presented): A compound represented by the following formula (I) or a physiologically acceptable salt thereof, or hydrate thereof



(I)

wherein, R^1 and R^2 each independently represent hydrogen atom, a halogen atom, hydroxyl group, a group of $OZ_{1\text{-}6}$ (the group of $OZ_{1\text{-}6}$ represents an alkyl group having 1-

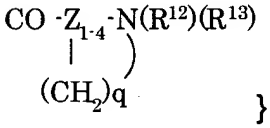
6 carbon atoms or a fluoroalkyl group having 1-6 carbon atoms, which bonds via the oxygen atom), a group of $S(O)_nZ_{1-4}$ (Z_{1-4} represents an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms or an alkylene group derived therefrom), a group of $N(R^{12})(R^{13})$ (R^{12} and R^{13} each independently represent hydrogen atom, an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms), a group of Z_{1-8} which may be substituted (Z_{1-8} represents an alkyl group having 1-8 carbon atoms or a fluoroalkyl group having 1-8 carbon atoms), a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group, or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$);

W^1 represents a group selected from the group consisting of -CH=CH-, $-N(R^{12})CO-$, $-CON(R^{12})-$, $-CH_2O-$ and $-CH_2CH_2-$ (each of the aforementioned groups binds to the thiazole ring at the left end);

R^3 represents hydrogen atom, a halogen atom, hydroxyl group or an amino group;

R^4 represents a group selected from the group consisting of hydrogen atom, a group of $-OZ_{0-4}R^5$ (Z_{0-4} represents an alkylene group having 1-4 carbon atoms, a fluorine-substituted alkylene group having 1-4 carbon atoms or a single bond, and R^5 represents a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl

group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$), a group of $-S(O)_nZ_{0-4}R^5$, a group of $-N(R^6)(R^7)$ {R^6 and R^7 each independently represent hydrogen atom or Z_{1-4}, or they may bind to each other to form a saturated or unsaturated 5- to 7-membered ring (the ring may contain one or two hetero atoms as ring constituting atoms), and R^6 and R^7 may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of $OCON(R^{12})(R^{13})$, a group of $CON(R^{12})(R^{13})$, a group of $N(R^{12})CON(R^{12})(R^{13})$, a group of Z_{1-4}, a group of OZ_{1-4}, a group $S(O)_nZ_{1-4}$, group of CH_2OH, a group of $(CH_2)_mN(R^{12})(R^{13})$, carboxyl group, cyano group, a group of $CO\text{-}Z_{1-4}(R^{10})\text{-}N(R^{12})(R^{13})$ (R^{10} is a substituent corresponding to a side chain on an amino acid carbon or a group of $-Z_{1-4}-R^{11}$ (R^{11} represents a substituent which forms a quaternary salt) and a group of



}, a 5- or 6-membered aryl group which may be substituted and a 5- or 6-membered unsaturated heterocyclic group which may be substituted;

W^2 represents a single bond or $-C(R^8)=C(R^9)-$ (R^8 and R^9 each independently represent hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, cyano group, carboxyl group, hydroxymethyl group, cyanomethyl group, vinyl group or a group of $N(R^{12})(R^{13})$), Q represents an acidic group, and W^2 and Q may bind together to form

vinylidenethiazolidinedione in *E*- or *Z*-configuration or an equivalent heterocyclic ring; m and n each independently represent an integer of 0 to 2, and q represents an integer of 0 to 3; R^{14} represents hydrogen atom, Z_{1-4}, $Z_{1-4}R^5$ or $Z_{1-4}OR^5$; and X represents C-H and Y represents C-H or nitrogen atom.

Claim 6 (Currently Amended): A medicament composition for ~~therapeutic~~ treatment of infection ~~by microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ which comprises a compound represented by the formula (I) according to claim 1 or a physiologically acceptable salt thereof as an active ingredient.

Claim 7 (Currently Amended): A method for therapeutic treatment of infection by ~~microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ *Pseudomonas aeruginosa* comprising administering to a mammal in need thereof a therapeutically effective amount of the composition according to claim 6.

Claim 8 (Previously Presented): The method according to claim 7, further comprising administering at least one antimicrobial agent.

Claim 9 (Previously Presented) The method according to claim 8, wherein the at least one antimicrobial agent is simultaneously administered with the composition.

Claim 10 (Previously Presented): The method according to claim 8, wherein the at least one antimicrobial agent is separately administered from the composition.

Claim 11 (Previously Presented): The method according to claim 8, wherein the at least one antimicrobial agent is successively administered with the composition.

Claim 12 (Previously Presented): The method according to claim 7 wherein the mammal is a human.

Claims 13-19 (Canceled)

Claim 20 (Currently Amended): A medicament composition for ~~therapeutic~~ treatment of infection ~~by microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ which comprises a compound represented by the formula (I) according to claim 5 or a physiologically acceptable salt thereof as an active ingredient.

Claim 21 (Canceled)

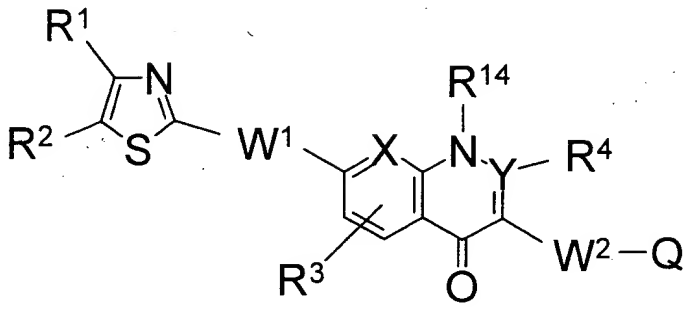
Claim 22 (Currently Amended): A method for therapeutic treatment of infection by ~~microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ *Pseudomonas aeruginosa* comprising administering to a mammal in need thereof a therapeutically effective amount of the composition according to claim 20.

Claim 23 (Canceled)

Claim 24 (Previously Presented): The method according to claim 22, further comprising administering at least one antimicrobial agent.

Claim 25. (Currently Amended): A method for therapeutic treatment of infection by ~~microorganisms selected from Pseudomonas aeruginosa and bacteria having a genetically homologous drug efflux pump~~ *Pseudomonas aeruginosa* comprising administering to a mammal in need thereof a therapeutically effective amount of a composition comprising a compound represented by formula (I) or a physiologically

acceptable salt thereof as an active ingredient and at least one antimicrobial agent



(I)

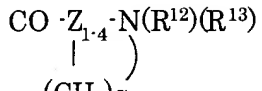
wherein, R^1 and R^2 each independently represent hydrogen atom, a halogen atom, hydroxyl group, a group of OZ_{1-6} (the group of OZ_{1-6} represents an alkyl group having 1-6 carbon atoms or a fluoroalkyl group having 1-6 carbon atoms, which bonds via the oxygen atom), a group of $S(O)_nZ_{1-4}$ (Z_{1-4} represents an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms or an alkylene group derived therefrom), a group of $N(R^{12})(R^{13})$ (R^{12} and R^{13} each independently represent hydrogen atom, an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms), a group of Z_{1-8} which may be substituted (Z_{1-8} represents an alkyl group having 1-8 carbon atoms or a fluoroalkyl group having 1-8 carbon atoms), a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group, or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$);

W^1 represents a group selected from the group consisting of -CH=CH-, $-N(R^{12})CO-$,

-CON(R^{12})-, -CH_2O- and -CH_2CH_2- (each of the aforementioned groups binds to the thiazole ring at the left end);

R^3 represents hydrogen atom, a halogen atom, hydroxyl group or an amino group;

R^4 represents a group selected from the group consisting of hydrogen atom, a group of -$OZ_{0-4}R^5$ (Z_{0-4} represents an alkylene group having 1-4 carbon atoms, a fluorine-substituted alkylene group having 1-4 carbon atoms or a single bond, and R^5 represents a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$), a group of -$S(O)_nZ_{0-4}R^5$, a group of -$N(R^6)(R^7)$ {R^6 and R^7 each independently represent hydrogen atom or Z_{1-4}, or they may bind to each other to form a saturated or unsaturated 5- to 7-membered ring (the ring may contain one or two hetero atoms as ring constituting atoms), and R^6 and R^7 may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of $OCON(R^{12})(R^{13})$, a group of $CON(R^{12})(R^{13})$, a group of $N(R^{12})CON(R^{12})(R^{13})$, a group of Z_{1-4}, a group of OZ_{1-4}, a group $S(O)_nZ_{1-4}$, group of CH_2OH, a group of $(CH_2)_mN(R^{12})(R^{13})$, carboxyl group, cyano group, a group of CO-$Z_{1-4}(R^{10})$-$N(R^{12})(R^{13})$ (R^{10} is a substituent corresponding to a side chain on an amino acid carbon or a group of -Z_{1-4}-R^{11} (R^{11} represents a substituent which forms a quaternary salt) and a group of



}, a 5- or 6-membered aryl group which may be substituted and a 5- or 6-membered unsaturated heterocyclic group which may be substituted;

W^2 represents a single bond or $-C(R^8)=C(R^9)-$ (R^8 and R^9 each independently represent hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, cyano group, carboxyl group, hydroxymethyl group, cyanomethyl group, vinyl group or a group of $N(R^{12})(R^{13})$), Q represents an acidic group, and W^2 and Q may bind together to form vinylidenethiazolidinedione in *E*- or *Z*-configuration or an equivalent heterocyclic ring; m and n each independently represent an integer of 0 to 2, and q represents an integer of 0 to 3; R^{14} represents hydrogen atom, an alkyl group having 1, 3 or 4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms, $Z_{1-4}R^5$ or $Z_{1-4}OR^5$; and X and Y each independently represent C-H or nitrogen atom.

Claims 26-27 (Canceled)

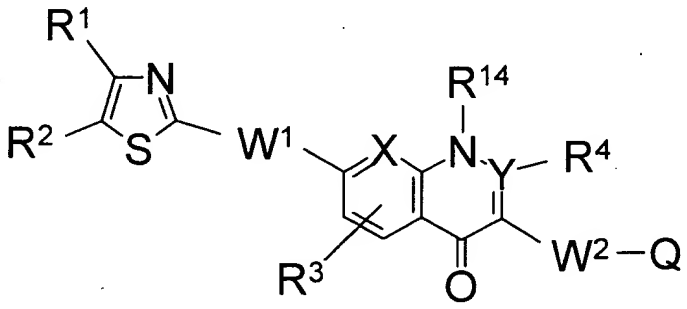
Claim 28 (Previously Presented): A method for inhibiting drug resistance acquisition due to a drug efflux pump comprising administering to a mammal in need thereof an effective amount to inhibit drug resistance acquisition due to a drug efflux pump of the composition according to claim 6.

Claim 29 (Previously Presented): The method according to claim 28 wherein the mammal is a human.

Claim 30 (Previously Presented): A method for inhibiting drug resistance acquisition due to a drug efflux pump comprising administering to a mammal in need thereof an effective amount to inhibit drug resistance acquisition due to a drug efflux pump of the composition according to claim 20.

Claim 31 (Previously Presented): The method according to claim 30 wherein the mammal is a human.

Claim 32 (Previously Presented): A method for inhibiting drug resistance acquisition due to a drug efflux pump comprising administering to a mammal in need thereof an effective amount to inhibit drug resistance acquisition due to a drug efflux pump of a composition comprising a compound represented by formula (I) or a physiologically acceptable salt thereof as an active ingredient



(I)

wherein, R^1 and R^2 each independently represent hydrogen atom, a halogen atom, hydroxyl group, a group of OZ_{1-6} (the group of OZ_{1-6} represents an alkyl group having 1-6 carbon atoms or a fluoroalkyl group having 1-6 carbon atoms, which bonds via the oxygen atom), a group of $S(O)_nZ_{1-4}$ (Z_{1-4} represents an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms or an alkylene group derived therefrom), a group of $N(R^{12})(R^{13})$ (R^{12} and R^{13} each independently represent hydrogen

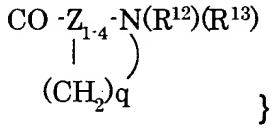
atom, an alkyl group having 1-4 carbon atoms or a fluoroalkyl group having 1-4 carbon atoms), a group of Z_{1-8} which may be substituted (Z_{1-8} represents an alkyl group having 1-8 carbon atoms or a fluoroalkyl group having 1-8 carbon atoms), a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group, or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of $CON(Z_{1-4})(Z_{1-4})$);

W^1 represents a group selected from the group consisting of -CH=CH-, $-N(R^{12})CO-$, $-CON(R^{12})-$, $-CH_2O-$ and $-CH_2CH_2-$ (each of the aforementioned groups binds to the thiazole ring at the left end);

R^3 represents hydrogen atom, a halogen atom, hydroxyl group or an amino group;

R^4 represents a group selected from the group consisting of hydrogen atom, a group of $-OZ_{0-4}R^5$ (Z_{0-4} represents an alkylene group having 1-4 carbon atoms, a fluorine-substituted alkylene group having 1-4 carbon atoms or a single bond, and R^5 represents a 5- to 7-membered cyclic alkyl group, an aryl group, a heteroaryl group or a 4- to 7-membered saturated or partially saturated heterocyclic group (the cyclic alkyl group, aryl group, heteroaryl group and heterocyclic group may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of OZ_{1-4}, a group of $S(O)_nZ_{1-4}$, a group of $N(R^{12})(R^{13})$, a group of Z_{1-4}, carboxyl group, a group of CO_2Z_{1-4}, group of $CONH_2$, a group of $CONH(Z_{1-4})$ and a group of

$CON(Z_{1-4})(Z_{1-4})$), a group of $-S(O)_nZ_{0-4}R^5$, a group of $-N(R^6)(R^7)$ {R^6 and R^7 each independently represent hydrogen atom or Z_{1-4}, or they may bind to each other to form a saturated or unsaturated 5- to 7-membered ring (the ring may contain one or two hetero atoms as ring constituting atoms), and R^6 and R^7 may have one to three substituents selected from the group consisting of a halogen atom, hydroxyl group, a group of $OCON(R^{12})(R^{13})$, a group of $CON(R^{12})(R^{13})$, a group of $N(R^{12})CON(R^{12})(R^{13})$, a group of Z_{1-4}, a group of OZ_{1-4}, a group $S(O)_nZ_{1-4}$, group of CH_2OH, a group of $(CH_2)_mN(R^{12})(R^{13})$, carboxyl group, cyano group, a group of $CO\text{-}Z_{1-4}(R^{10})\text{-}N(R^{12})(R^{13})$ (R^{10} is a substituent corresponding to a side chain on an amino acid carbon or a group of $-Z_{1-4}-R^{11}$ (R^{11} represents a substituent which forms a quaternary salt) and a group of



}, a 5- or 6-membered aryl group which may be substituted and a 5- or 6-membered unsaturated heterocyclic group which may be substituted;

W^2 represents a single bond or $-C(R^8)=C(R^9)-$ (R^8 and R^9 each independently represent hydrogen atom, a halogen atom, a lower alkyl group, an alkoxy group, cyano group, carboxyl group, hydroxymethyl group, cyanomethyl group, vinyl group or a group of $N(R^{12})(R^{13})$), Q represents an acidic group, and W^2 and Q may bind together to form vinylidenethiazolidinedione in *E*- or *Z*-configuration or an equivalent heterocyclic ring; m and n each independently represent an integer of 0 to 2, and q represents an integer of 0 to 3; R^{14} represents hydrogen atom, an alkyl group having 1, 3 or 4 carbon atoms or a

fluoroalkyl group having 1-4 carbon atoms, $Z_{1-4}R^5$ or $Z_{1-4}OR^5$; and X and Y each independently represent C-H or nitrogen atom.

33 (Previously Presented): The method according to claim 32 wherein the mammal is a human.